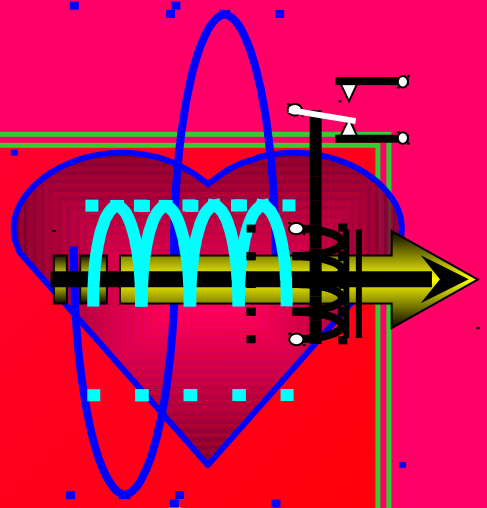
AC:

Electrical Circuits



Unclassified

Safety & Environmental Impact is “LOW”

Terminal Learning Objective

ACTION:

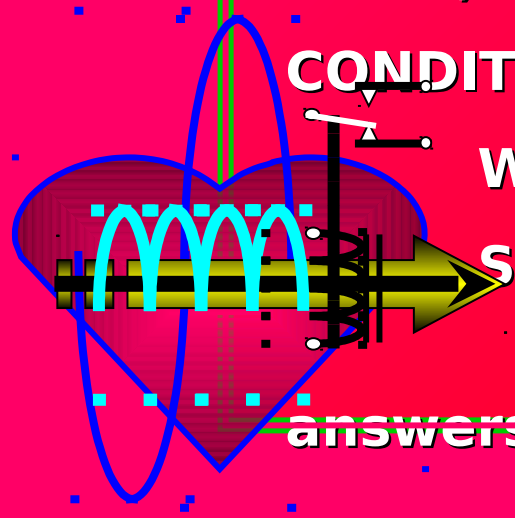
Identify Electrical Ckts Characteristics, Concepts of operation & Symptoms leading to a Malfunction. Given, Ckt Cards & Schematic.

CONDITIONS:

With out references.

STANDARD:

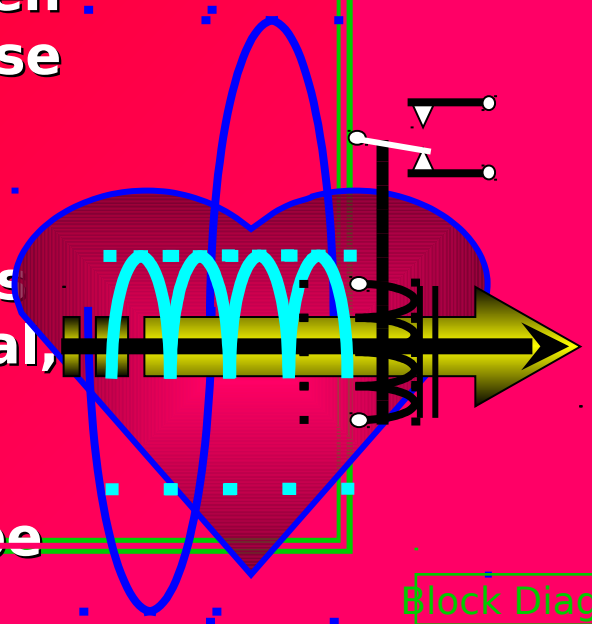
A minimum of 7 correct answers from 10 questions.



Introduction

In previous lessons the concepts of individual component operation has been discussed, in addition simple Ckts have been examined to see how these components work together.

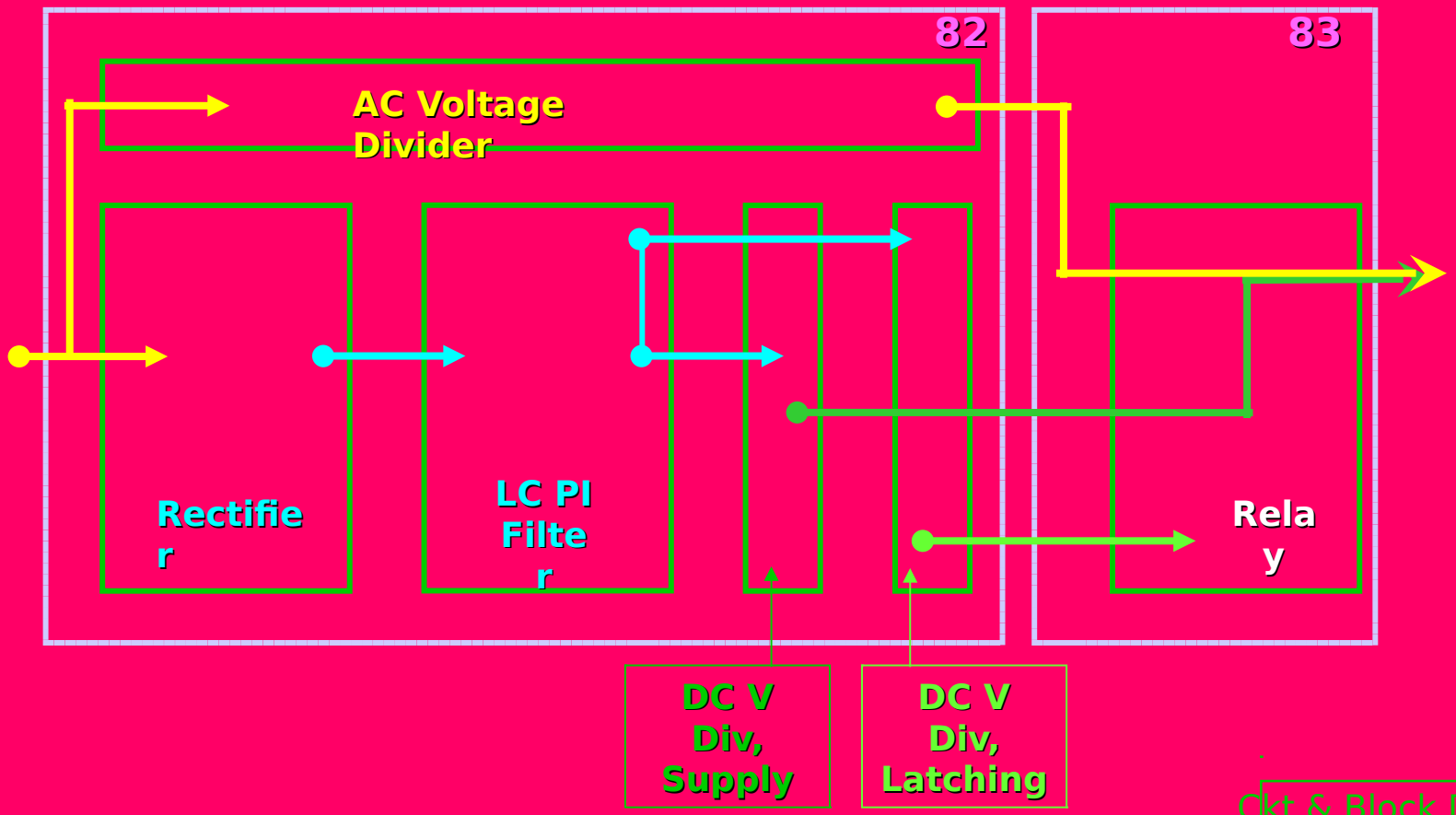
In this lesson we will use these components and Simple Ckts in combination, in a fully functional, practical application & examine how it all works together. Correct trouble shooting procedures will be reviewed.



Block Diagram

AC: Electrical Ckts

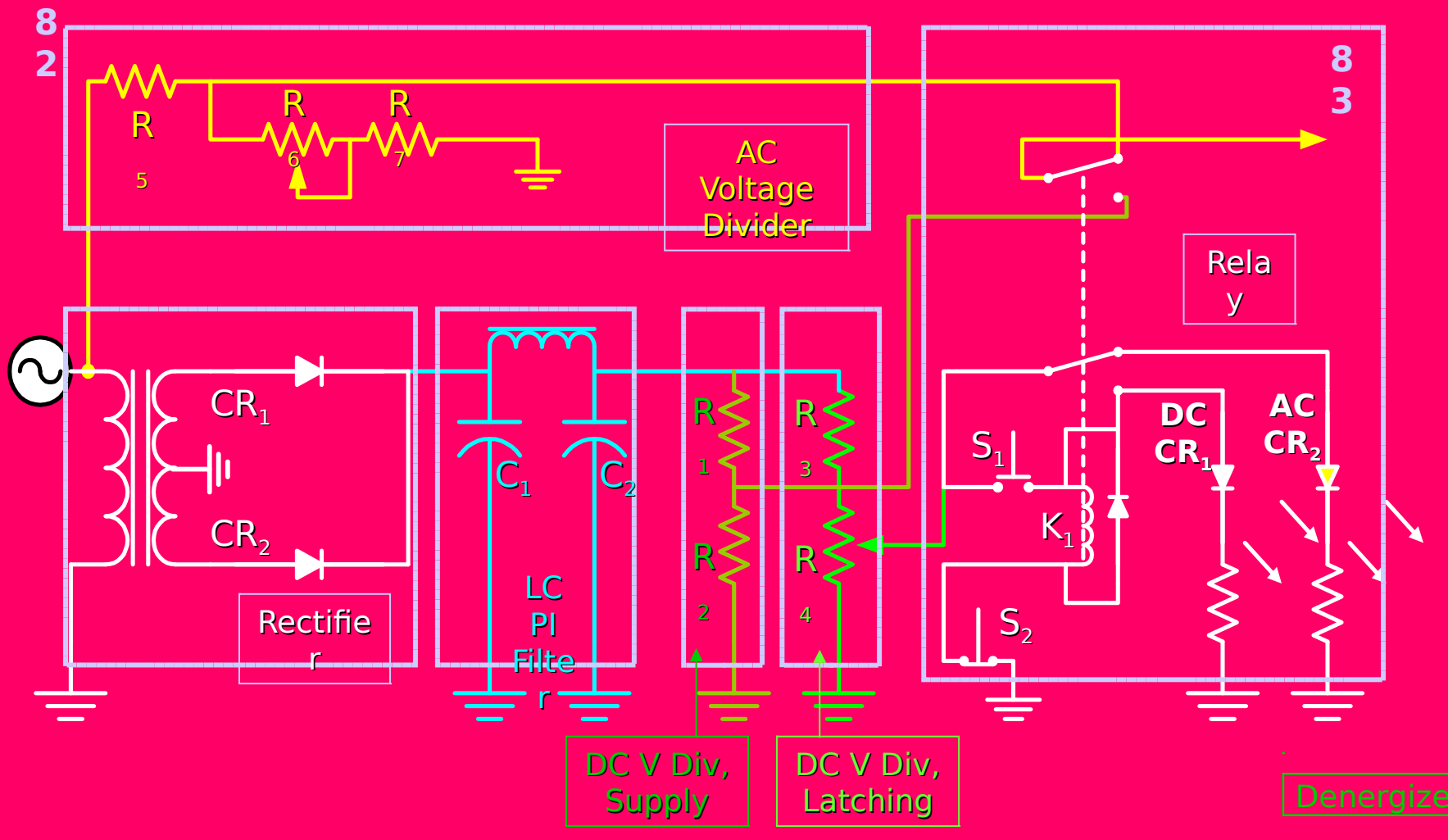
Block Diagram; PC 82 & 83 card



Ckt & Block Diagram

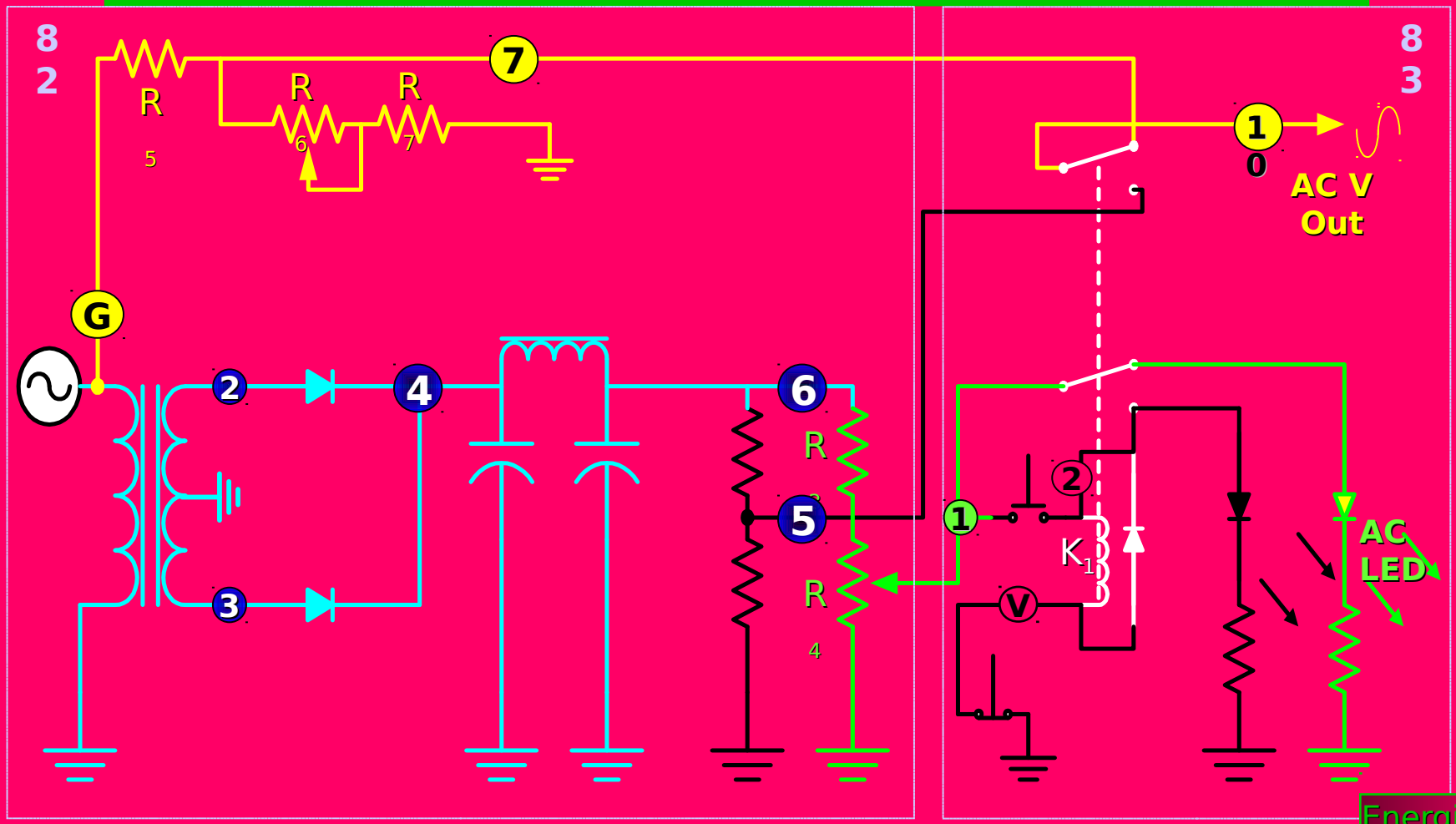
AC: Electrical Ckts

Schematic Diagram; PC 82 & 83 card, 6 Circuits.



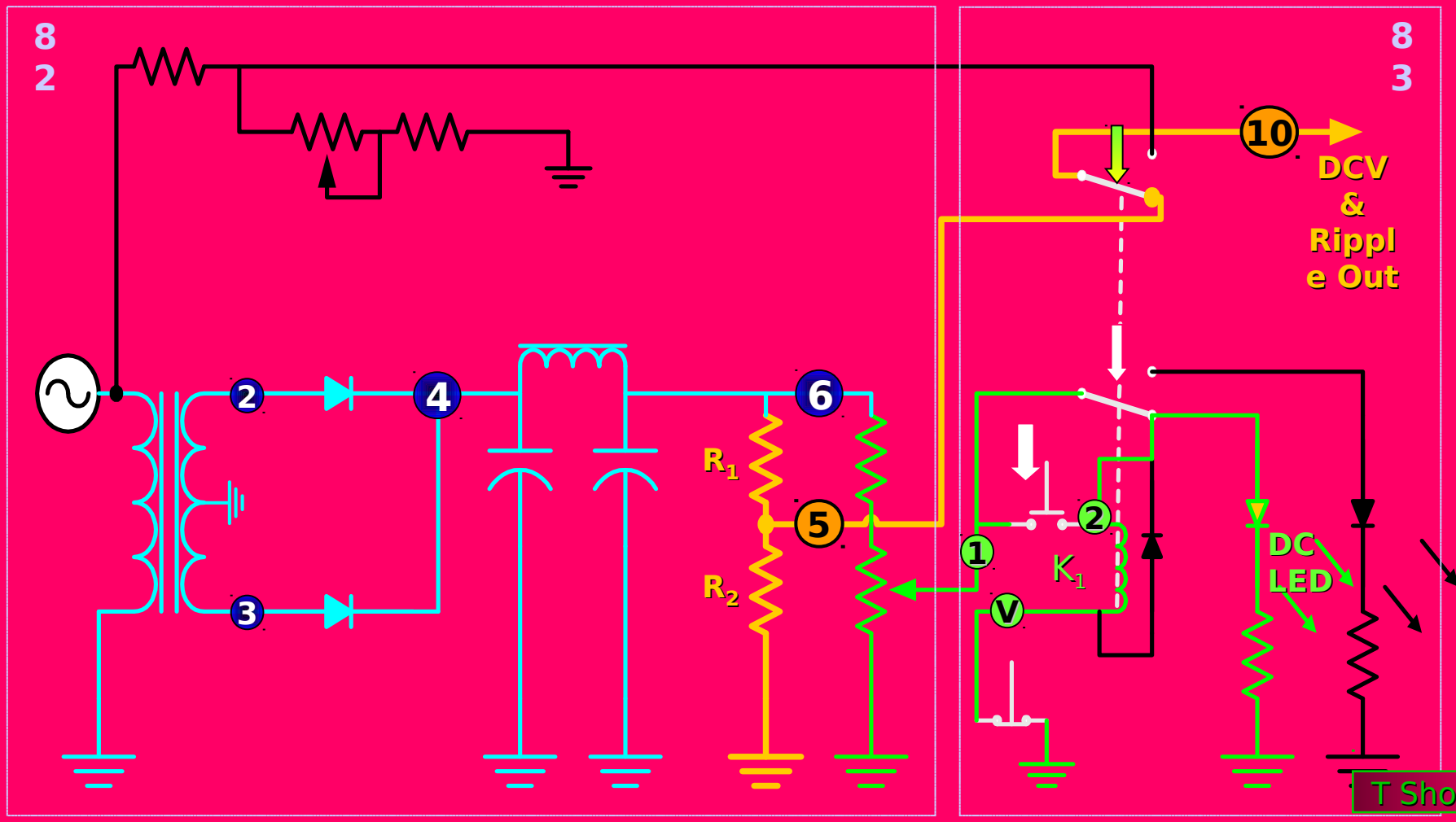
AC: Electrical Ckts

Schematic Diagram; Ckts Tracing, Denergized.



AC: Electrical Ckts

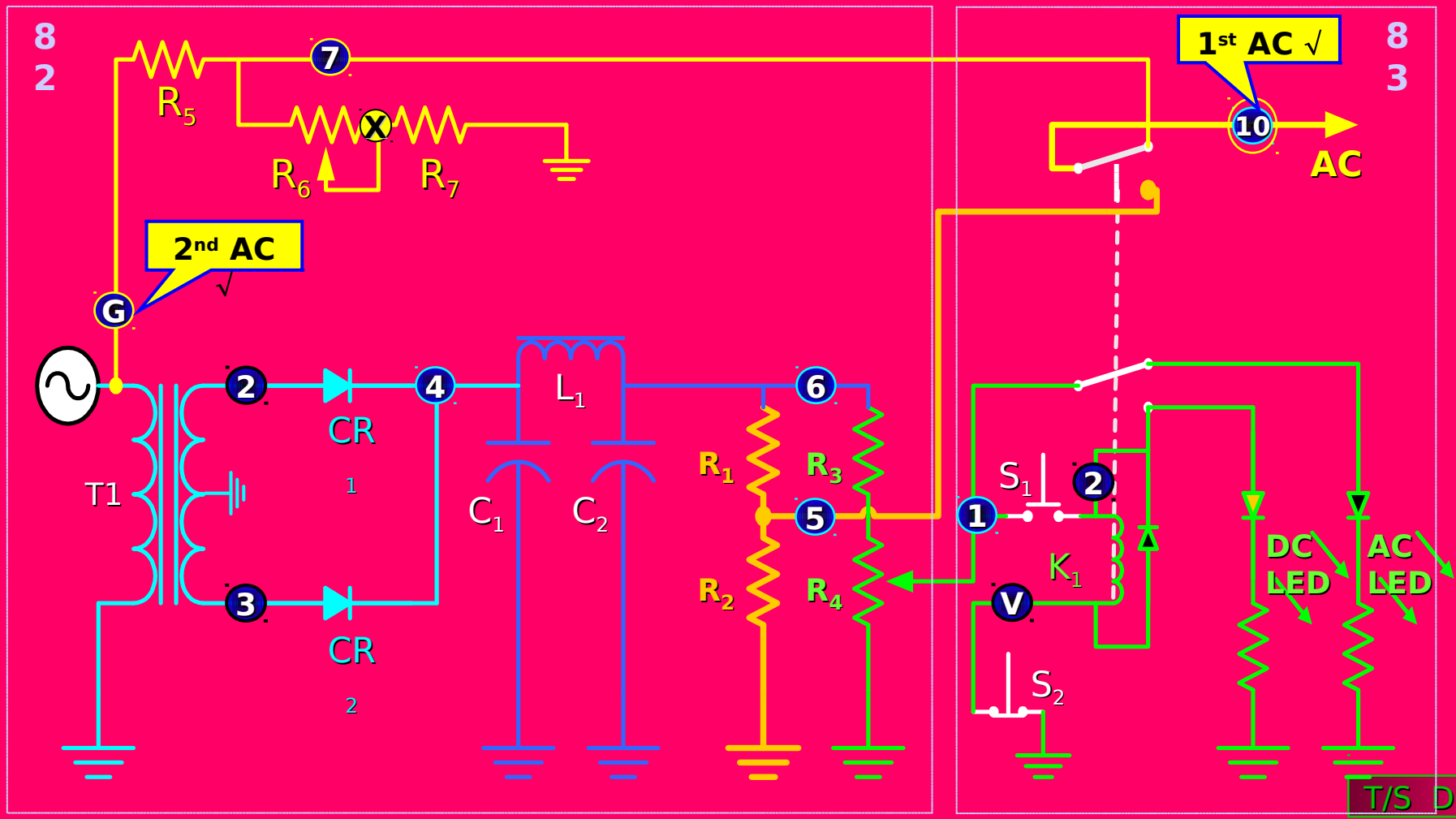
Schematic Diagram; Ckts Tracing, Energized.



T Shoot

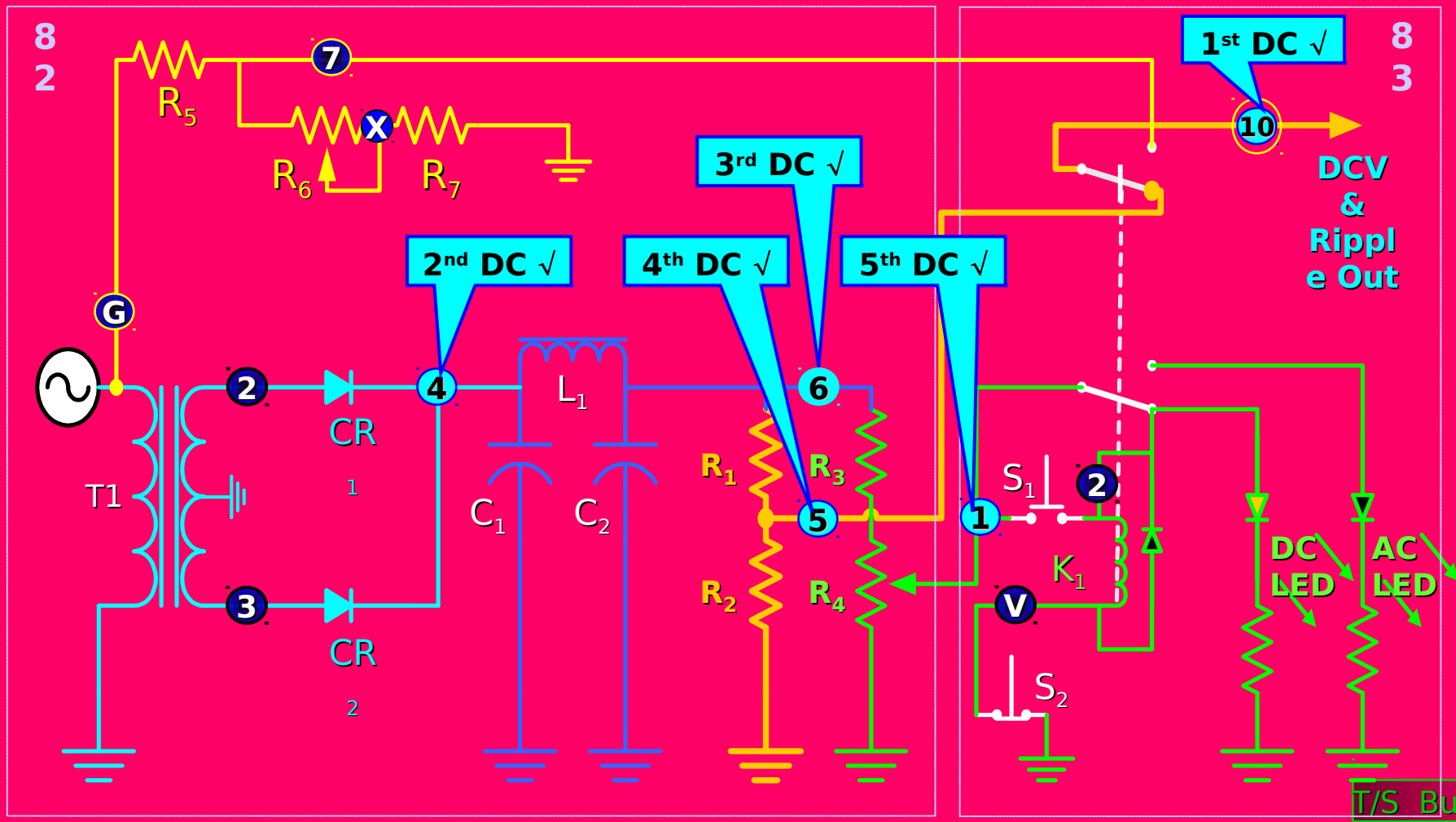
AC: Electrical Ckts

Schematic Diagram; Troubleshooting Sequence AC.



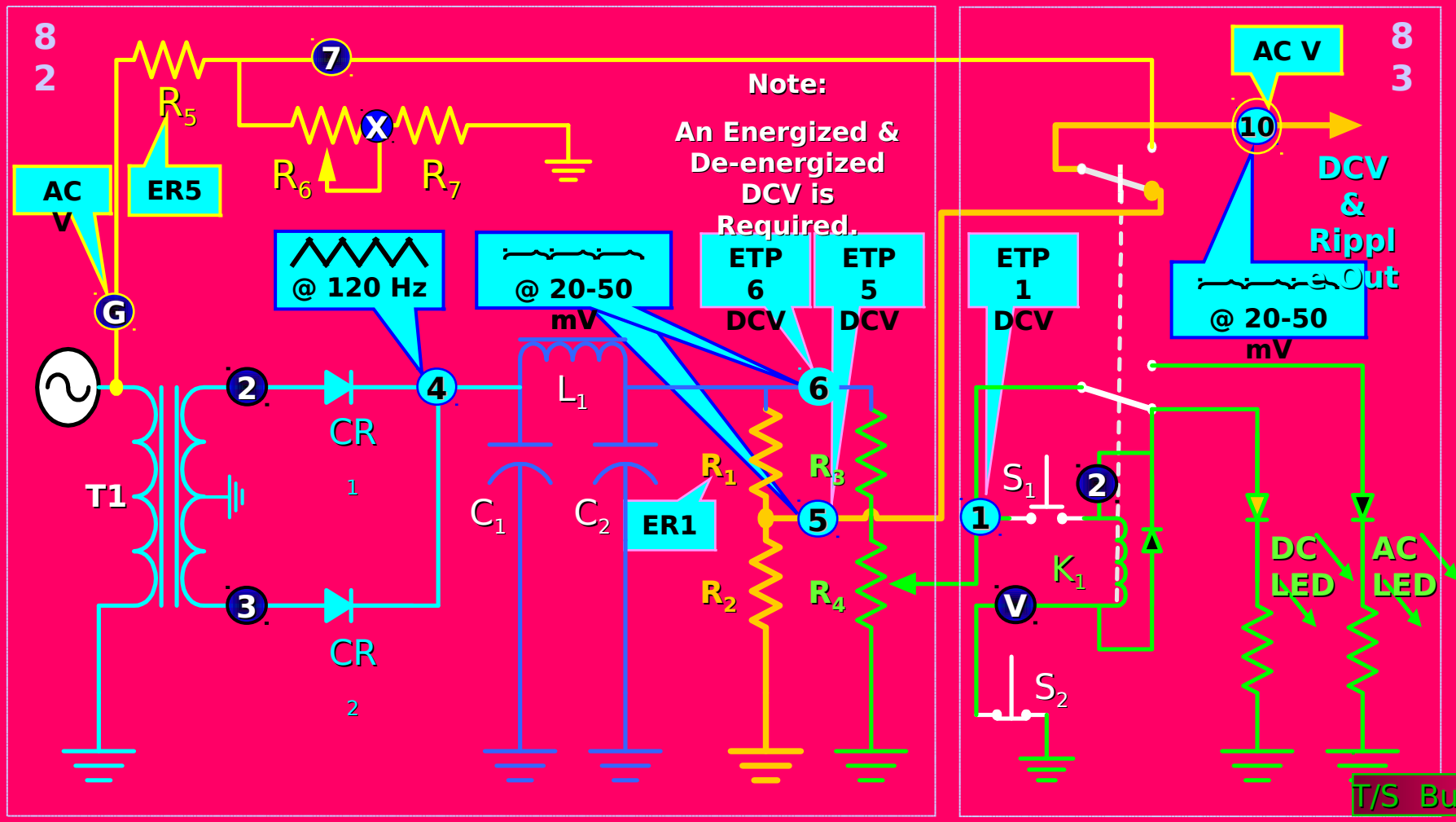
AC: Electrical Ckts

Schematic Diagram; Troubleshooting Sequence DC.



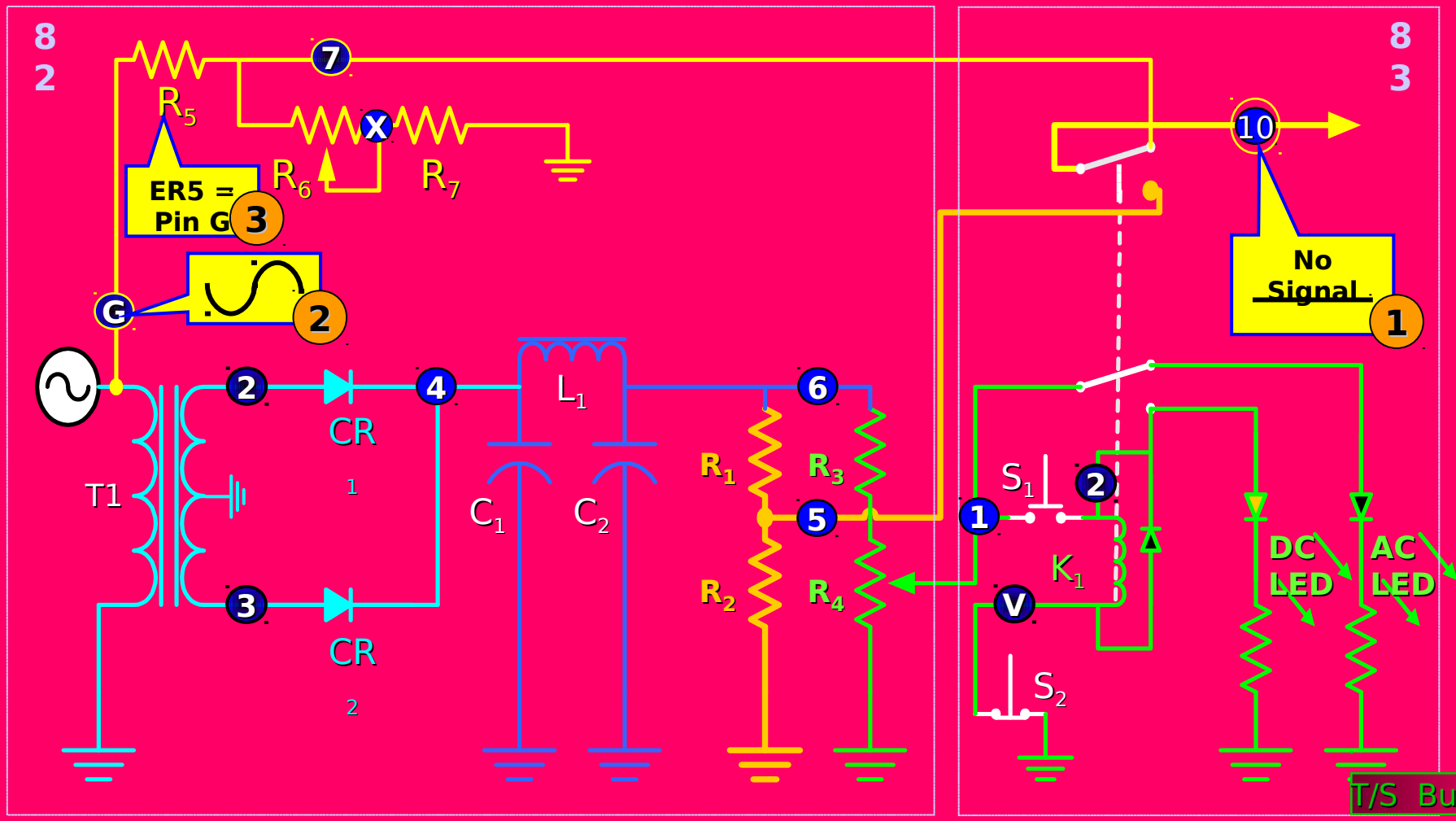
AC: Electrical Ckts

Schematic Diagram; Normals Required for T/S.



AC: Electrical Ckts

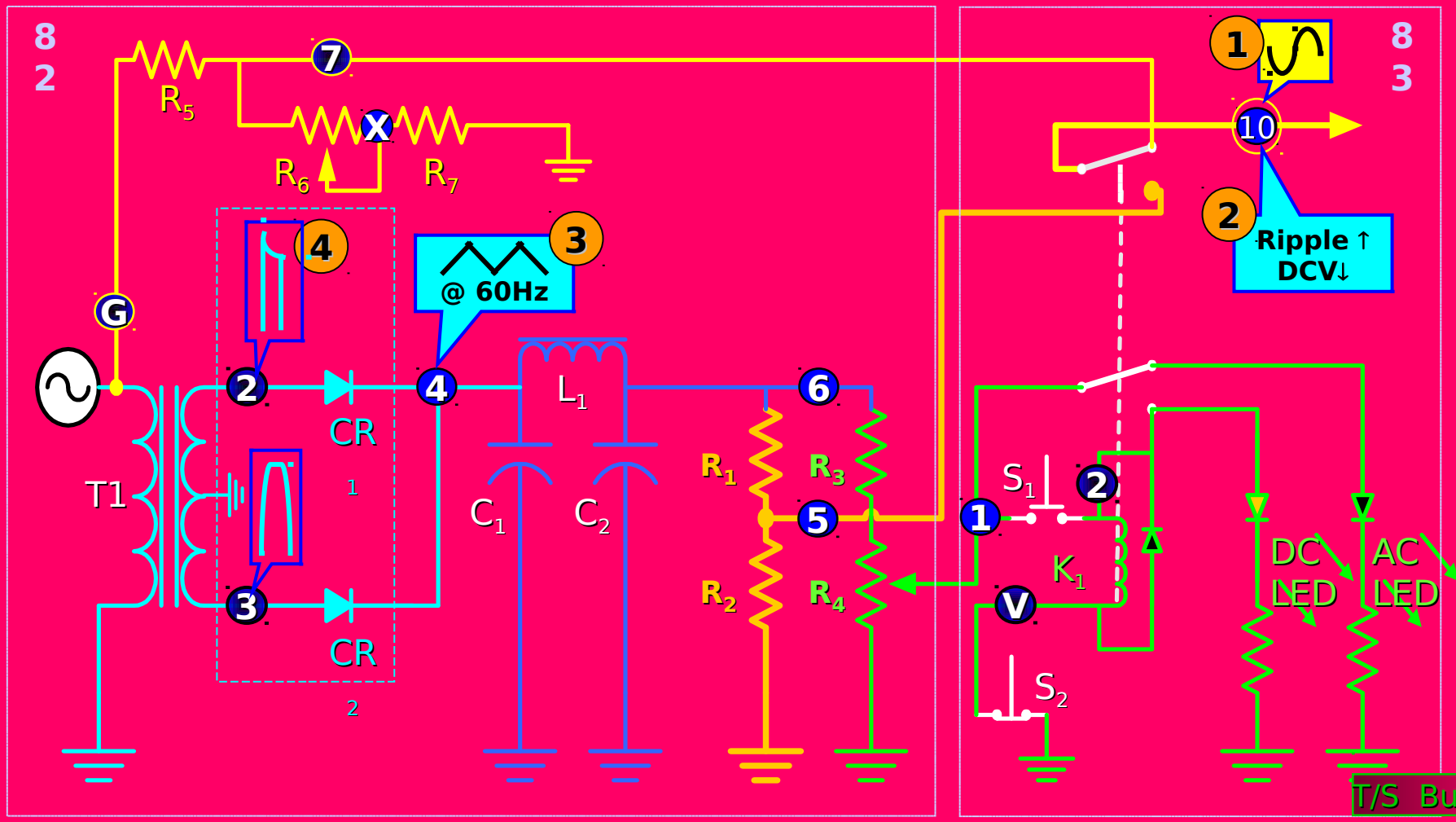
Schematic Diagram; Troubleshooting challenge 1 .



T/S Bug 2

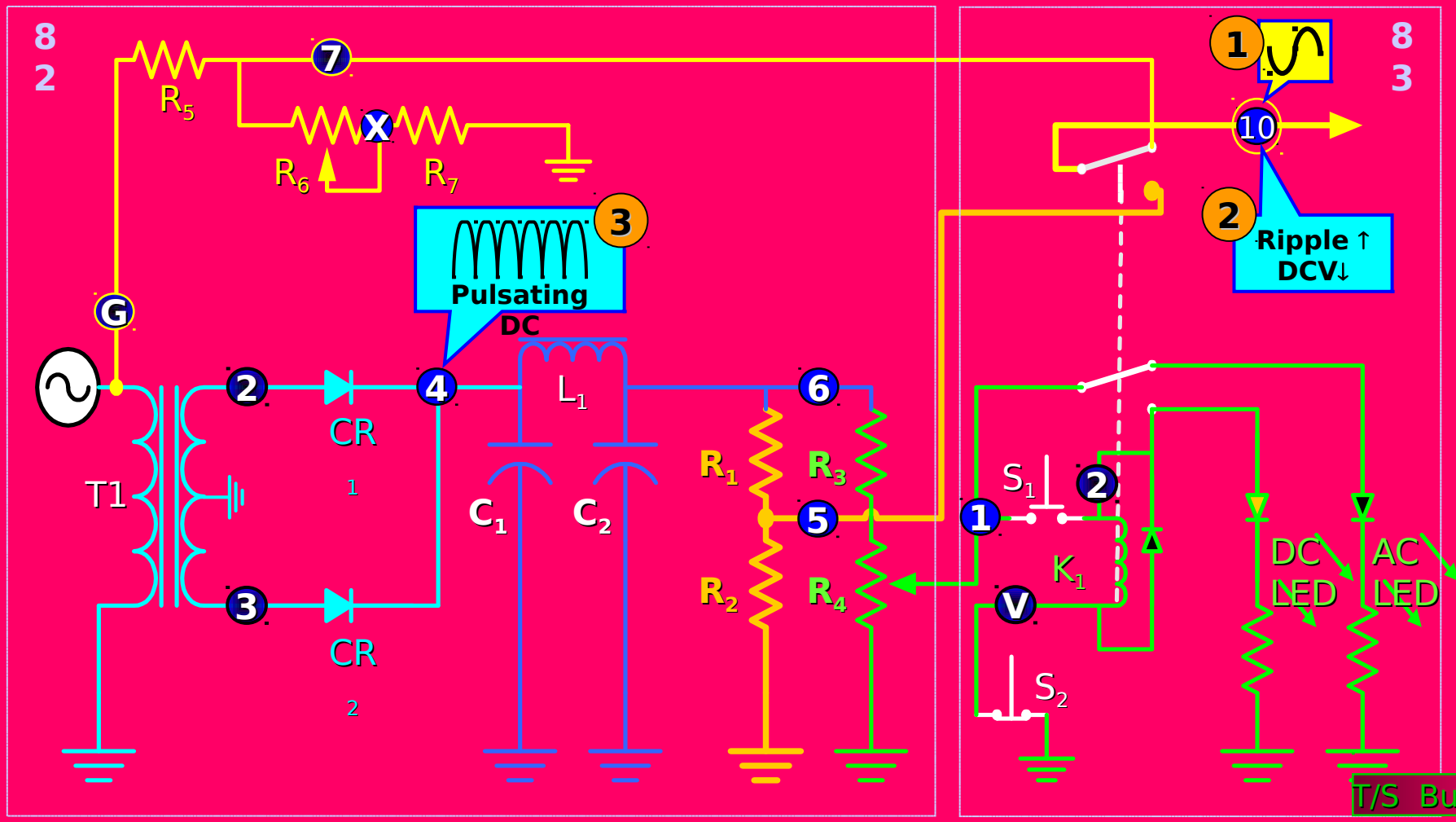
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 2 .



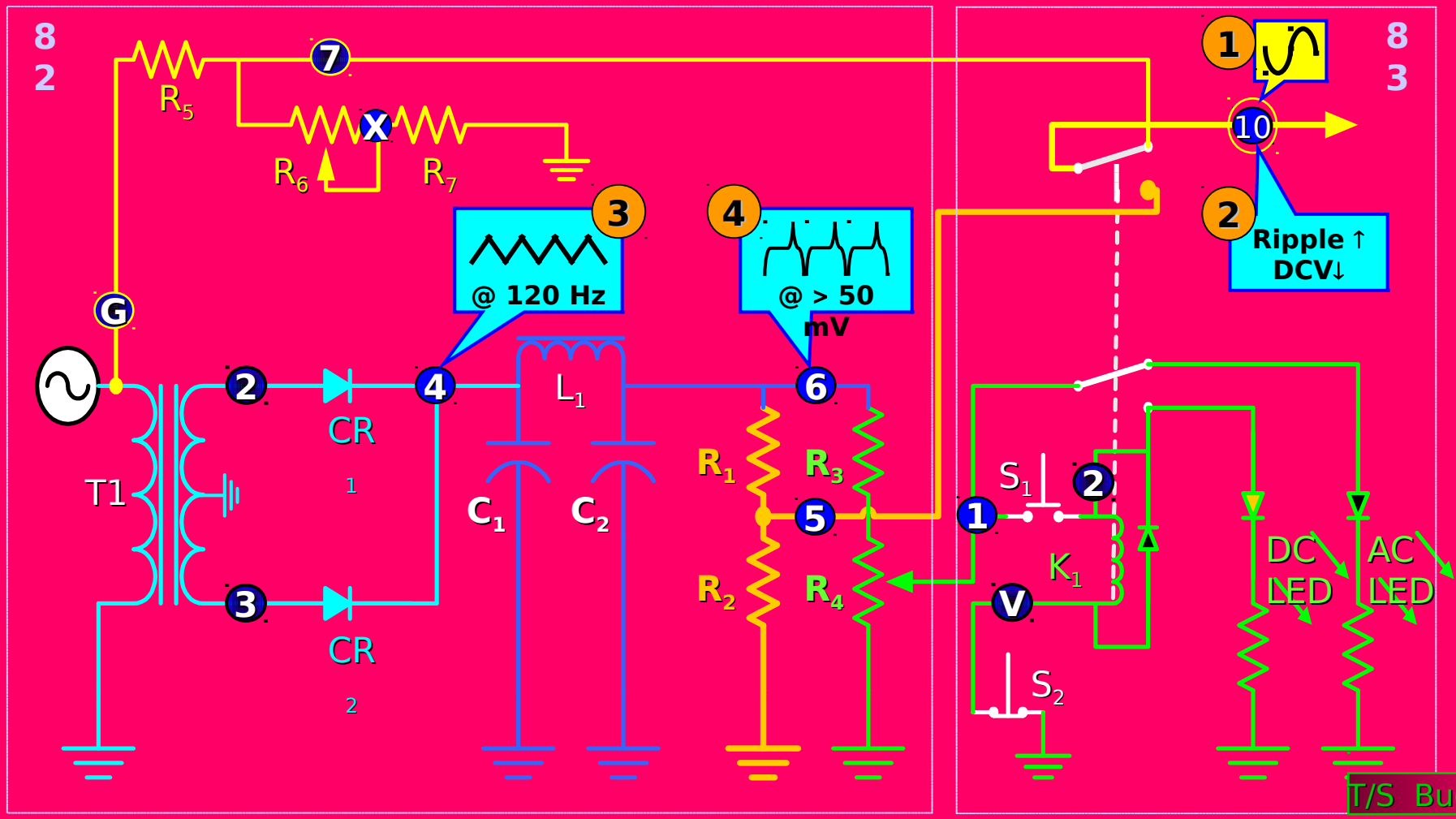
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 3 .



AC: Electrical Ckts

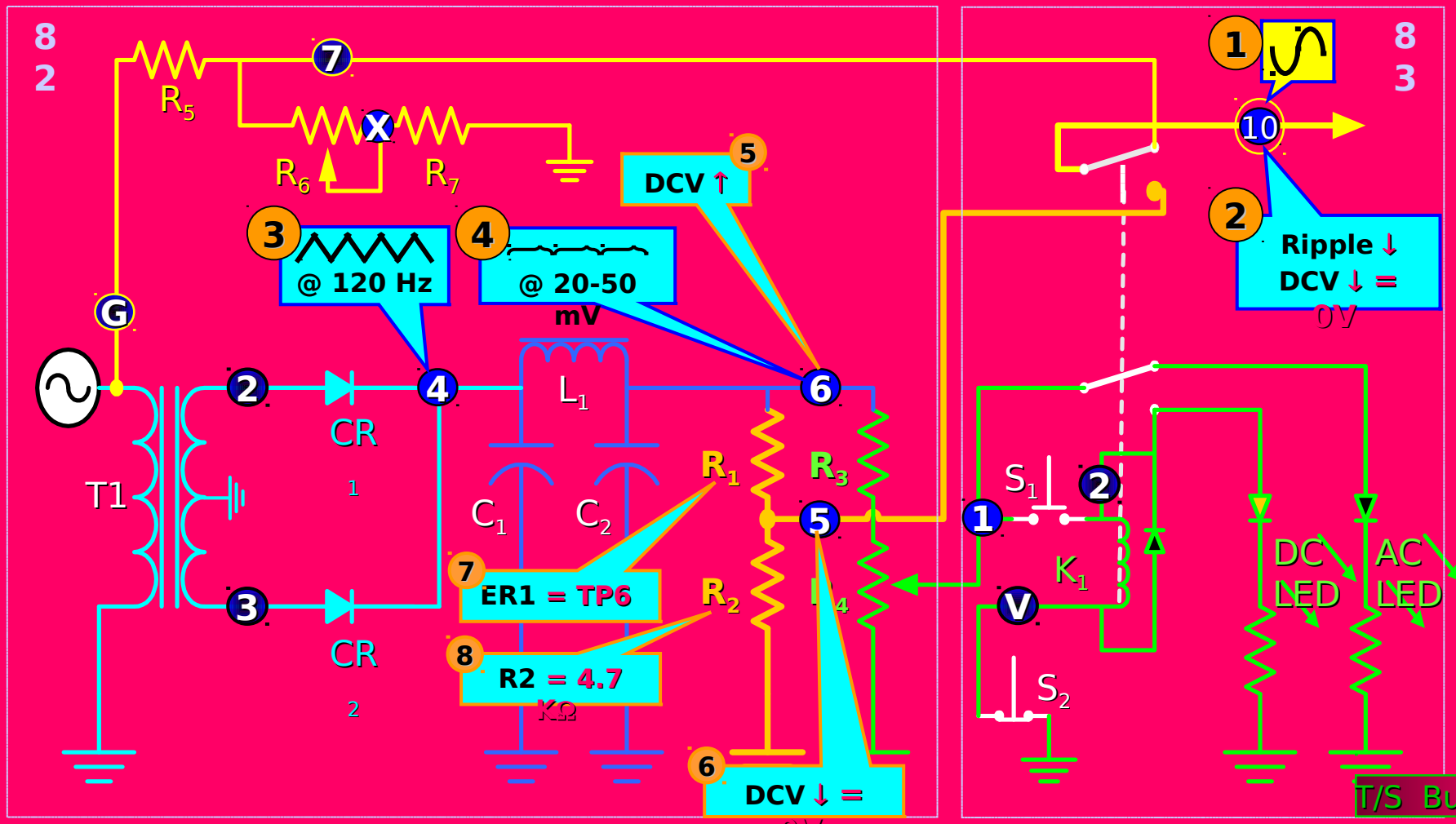
Schematic Diagram; Troubleshooting challenge 4 .



T/S Bug 4

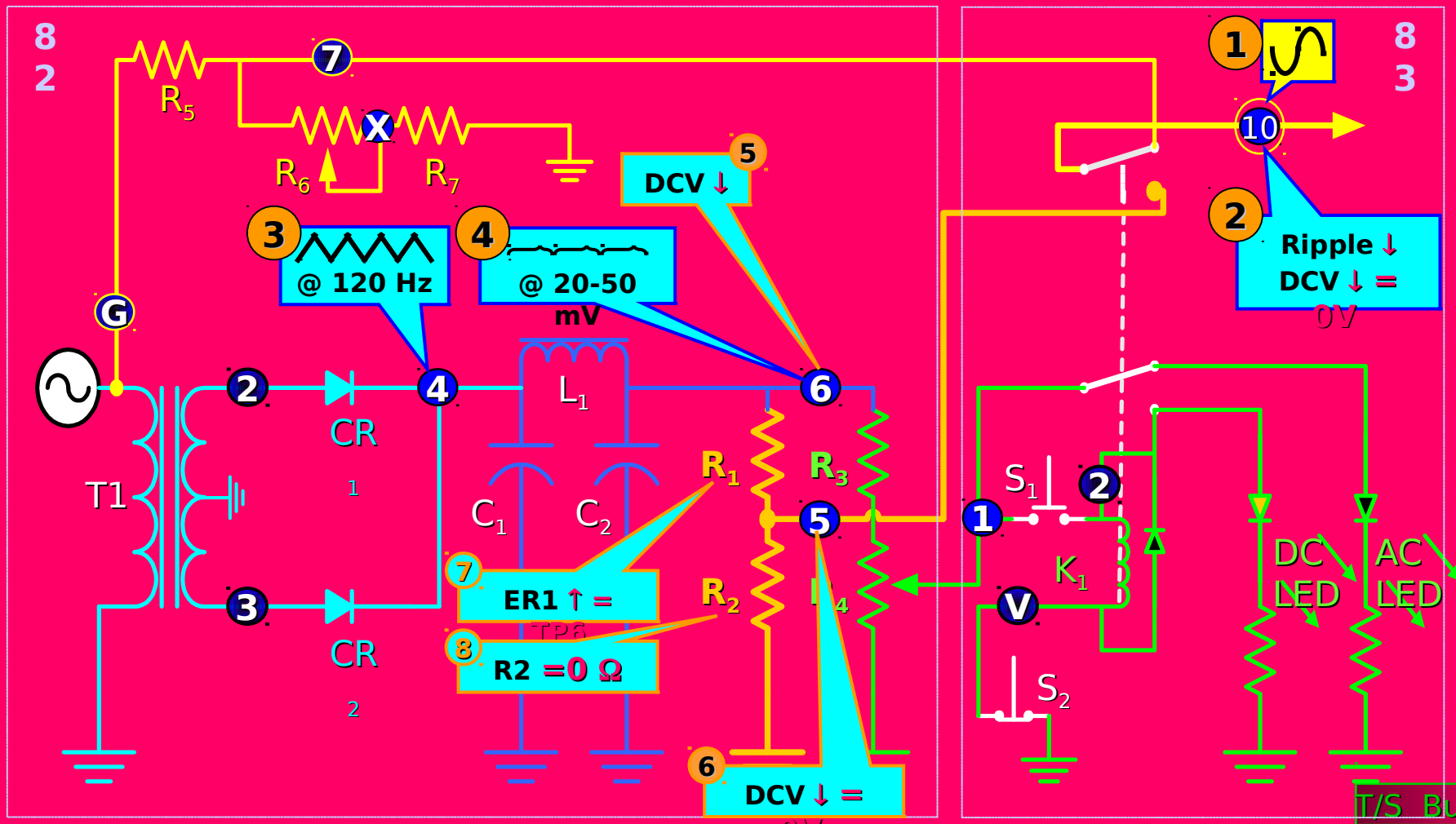
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 5 .



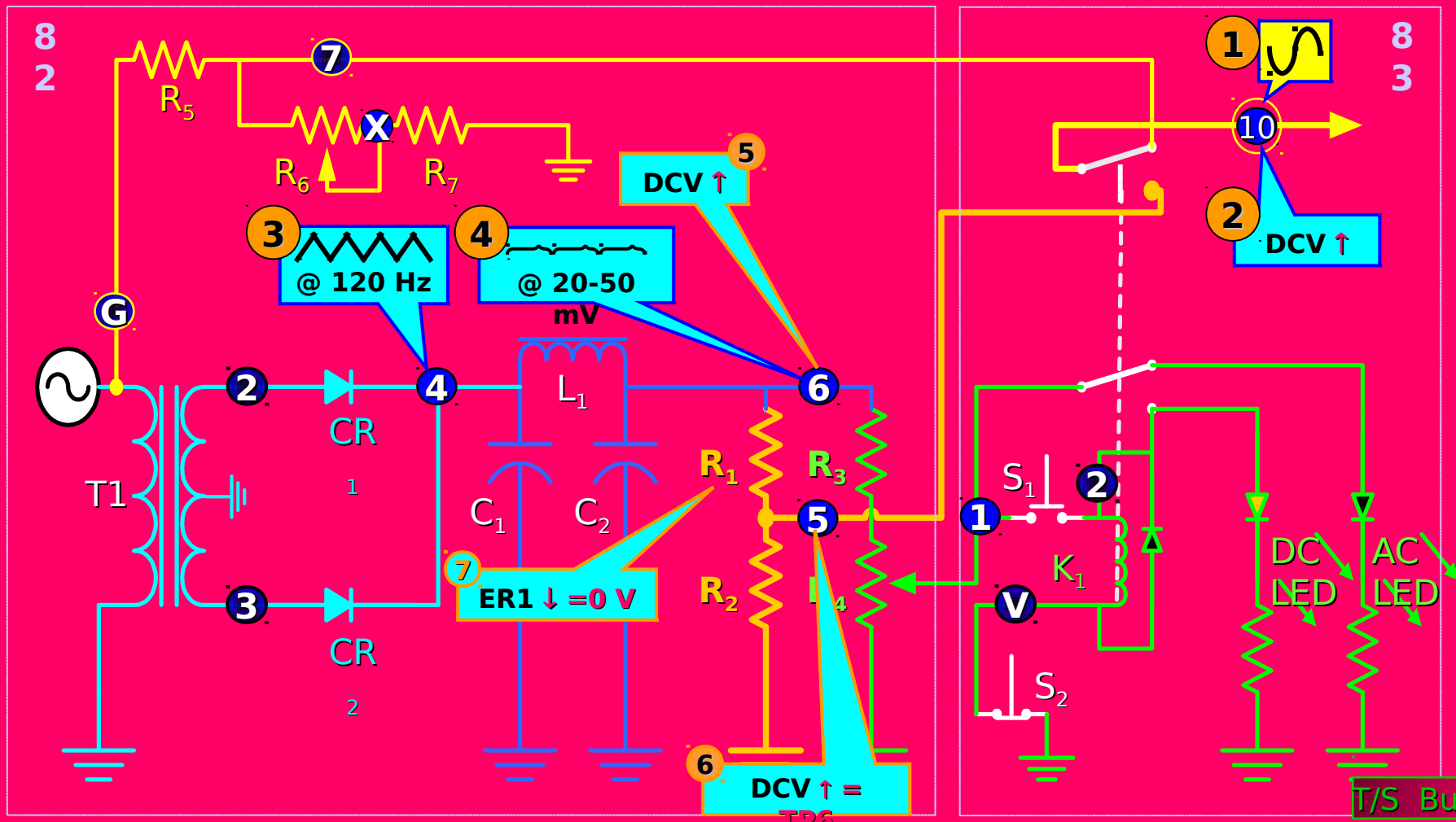
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 6 .



AC: Electrical Ckts

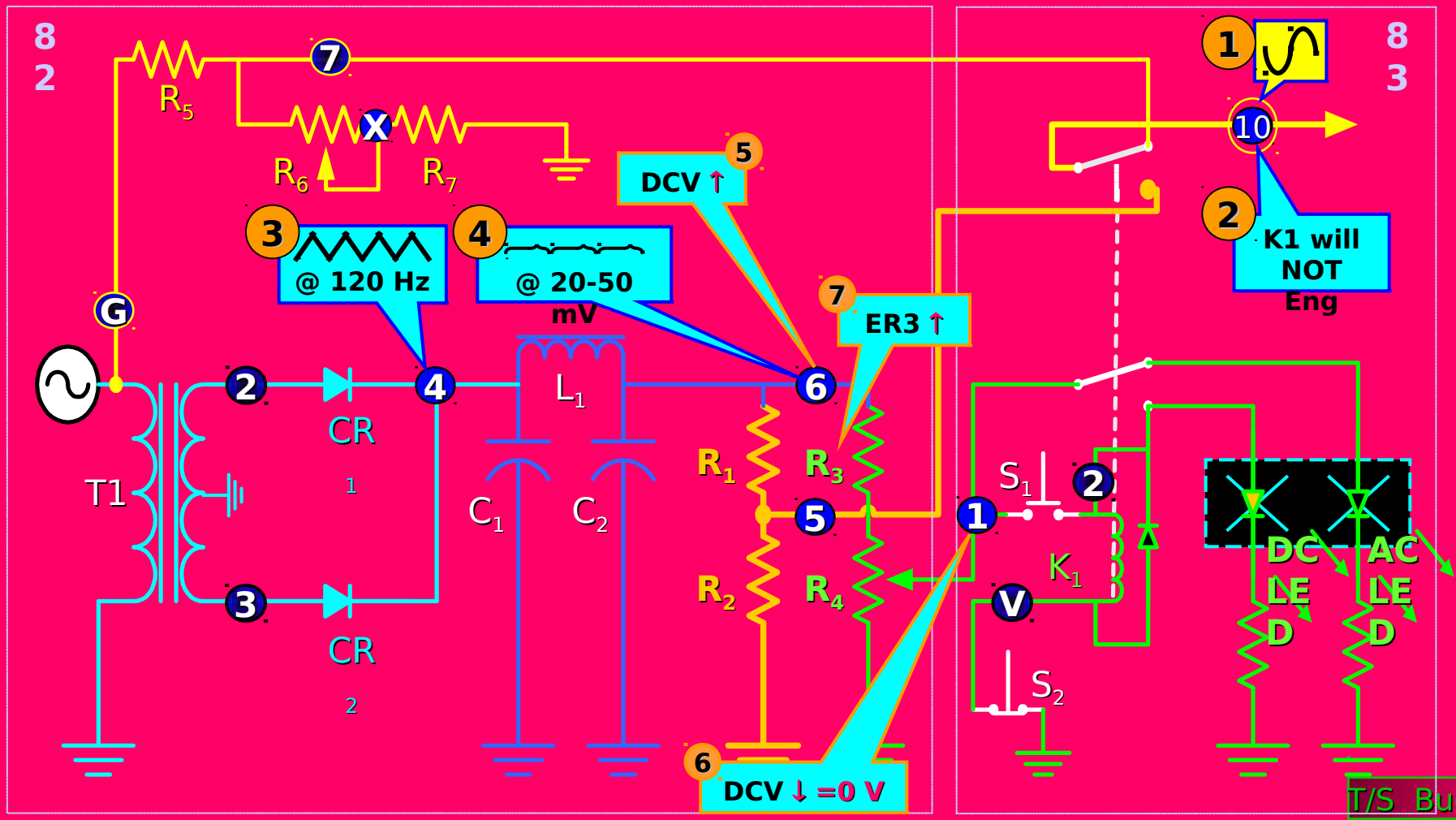
Schematic Diagram; Troubleshooting challenge 7 .



T/S Bug 7

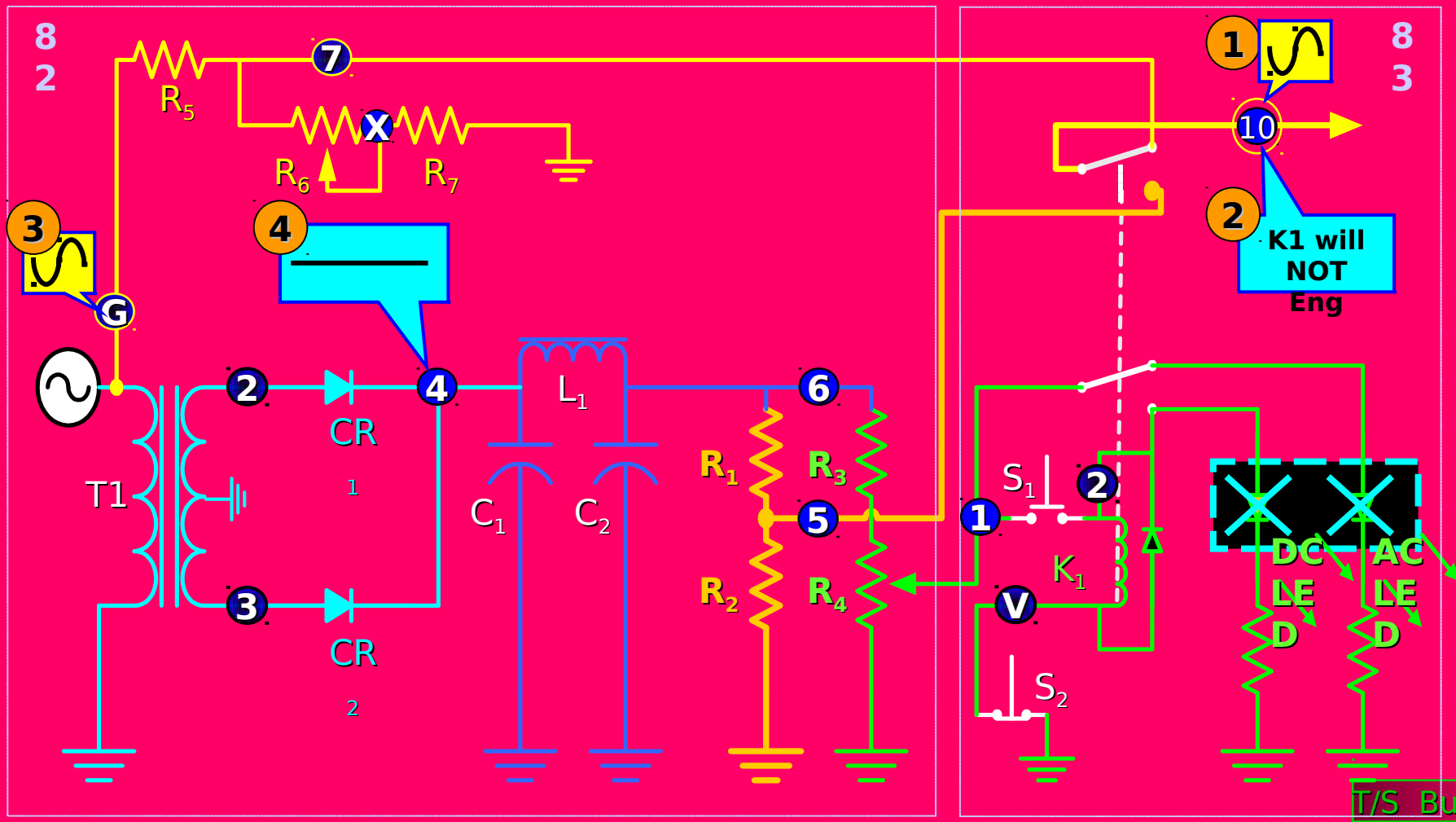
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 8 .



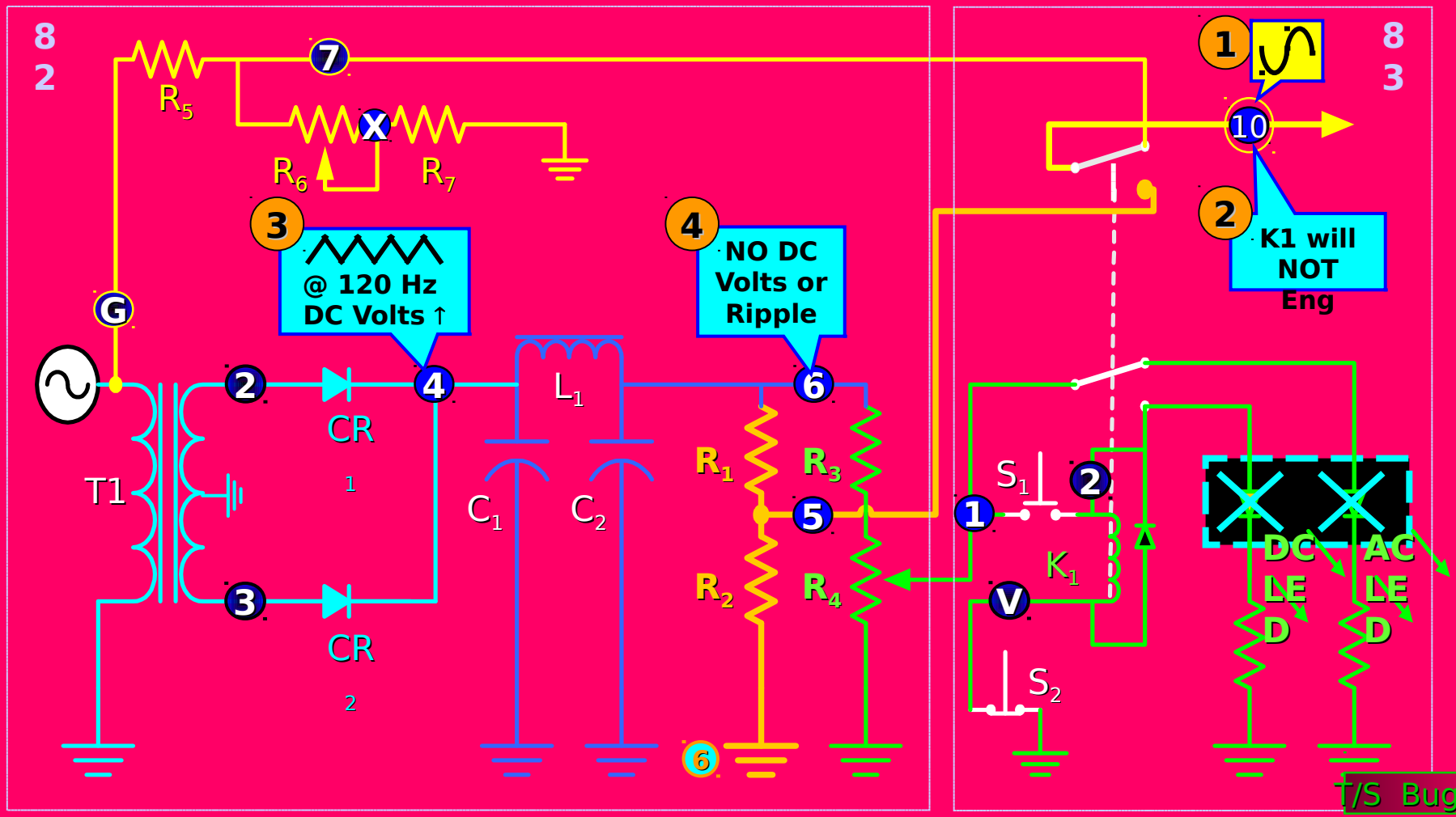
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 9 .



AC: Electrical Ckts

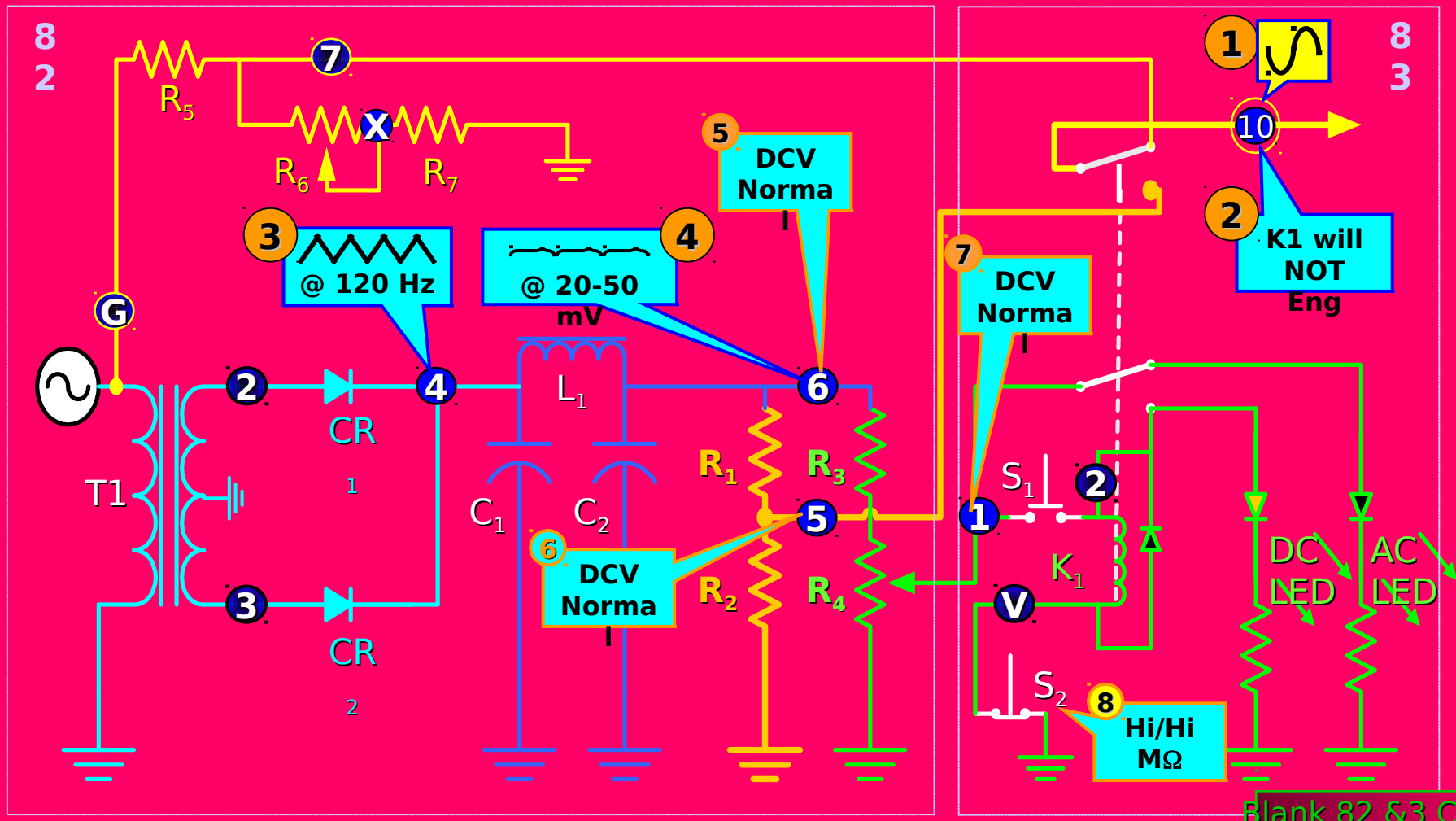
Schematic Diagram; Troubleshooting challenge 10 .



T/S Bug 10

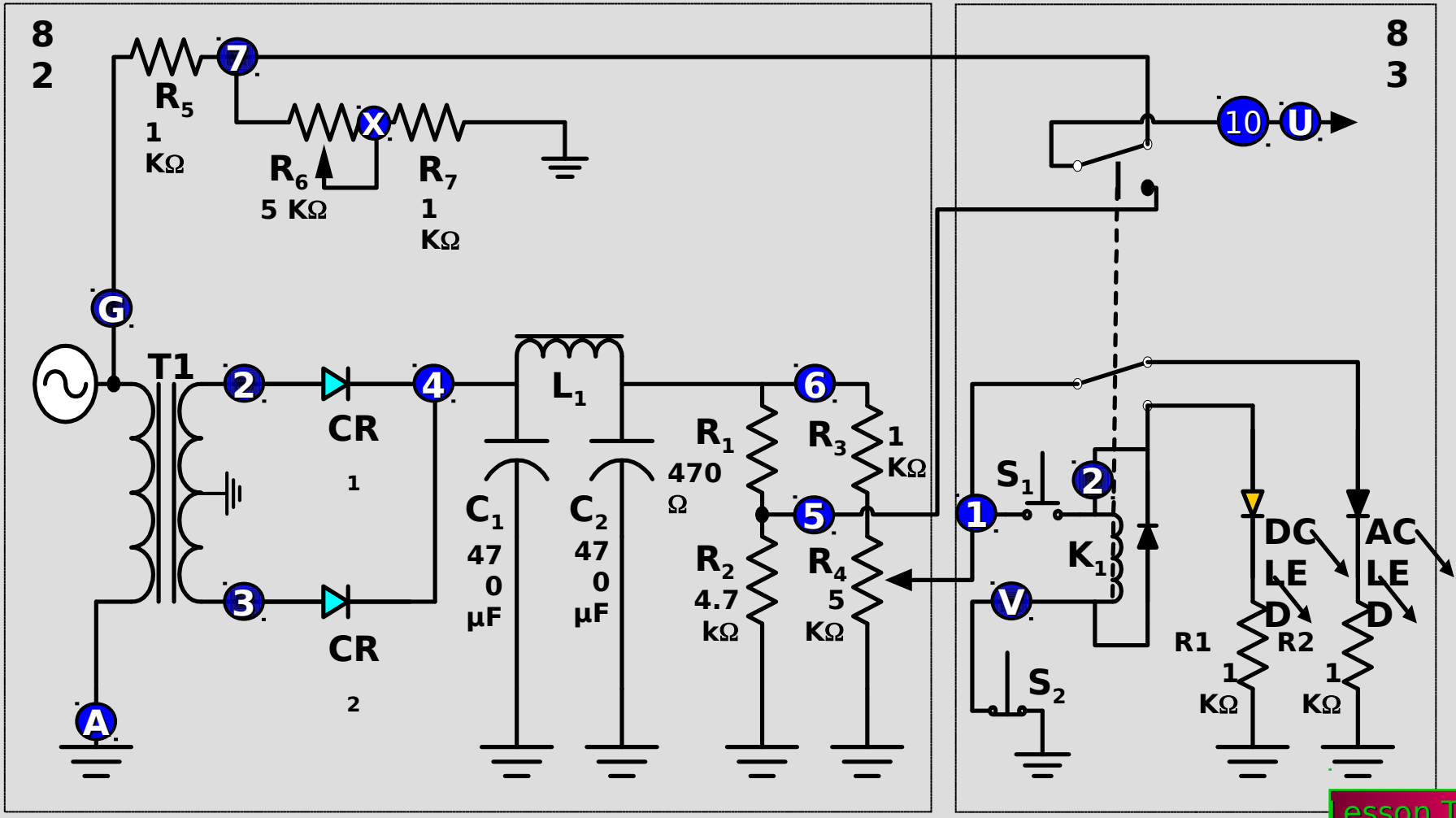
AC: Electrical Ckts

Schematic Diagram; Troubleshooting challenge 11.



AC: Electrical Ckts

Schematic Diagram; PC 83 & 83.



Lesson Test

AC: Electrical Ckts

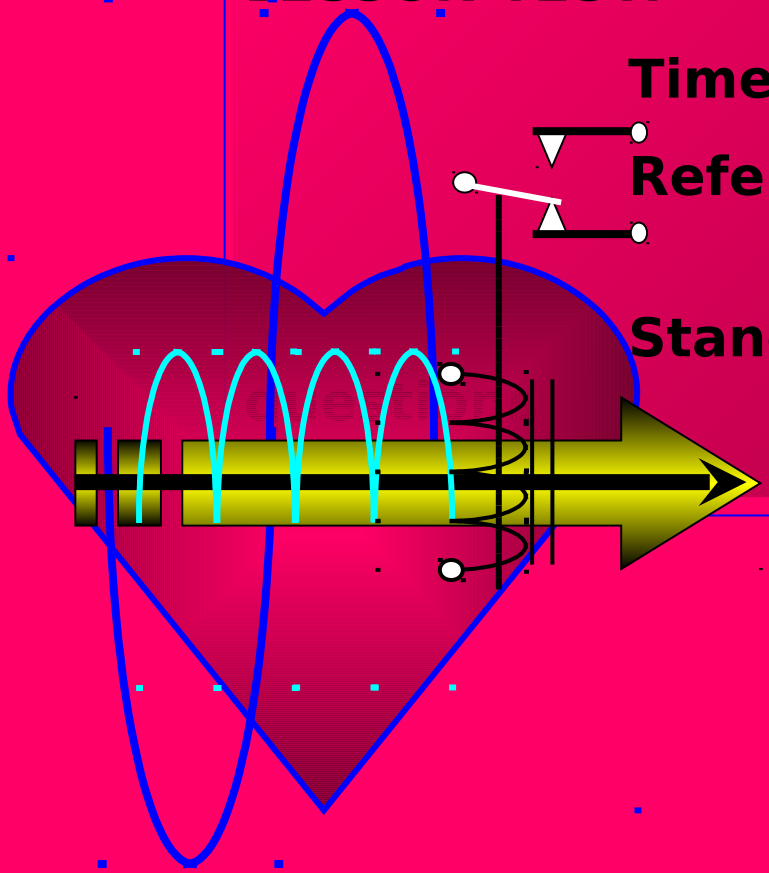
SUMMARY & QUESTIONS;

LESSON TEST:

Time; 20 Minutes.

References; Official OMEMS Training Aids.

Standard; 7 out of 10 correctly

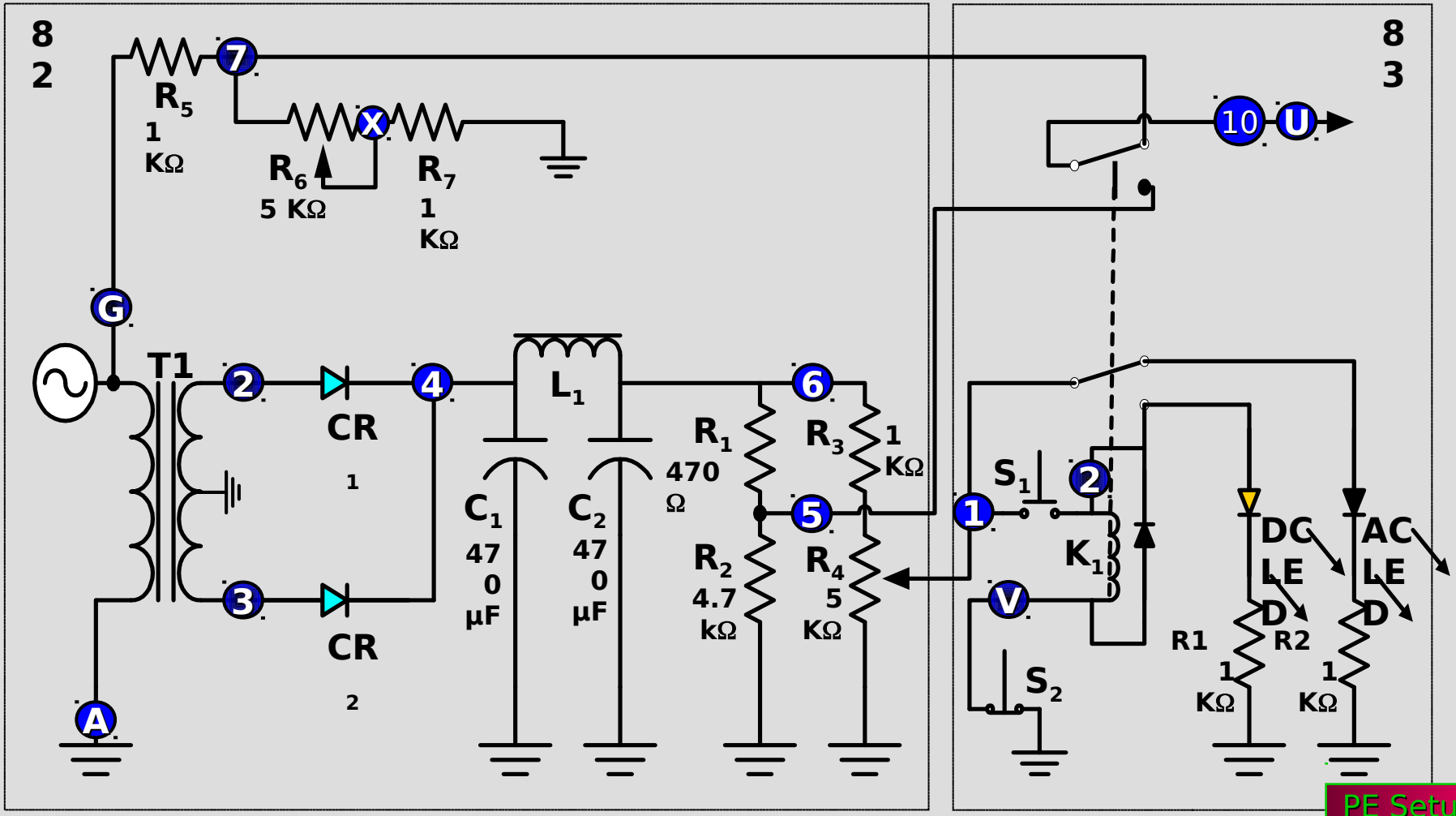


Blank 82 &3 Card

PE Setup

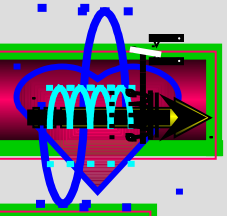
AC: Electrical Ckts

Schematic Diagram; PC 83 & 83.



PE Setup

AC: Electrical Ckts



PE Setup;

1. PC 82 Card on PC1 position.

   S1 Up to Ind.

2. PC 83 Card on PC2 position.

3. Turn AC "ON" on PC1.

   Enter Defaults F104, F114, F204. *Must be loaded @ all times*.

   Adjust R6 [82 card] for 11 VAC @ TP7.

   Adjust R4 [82 card] for 13 VDC @ [TP1 on 83 card] *Deenergized mode*.

4. Get Normals.

5. T/S Bugs. On Breaks, Turn the trainer appear "OFF" so it can cool down.
   new Bug number.

Note: after each bug reset trainer, Wait for 130A to then insert all 3 defaults then the

Bug {malfunction} Numbers;

E-104	F-107	F-102
F-113	F-111	F-108
F-110	F-205	

END